Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-9. (Canceled)

Claim 10. (Previously Presented) A method of preparing an electric double layer capacitor, comprising

preparing carbon fibers by:

- (i) carbonizing a mesophase pitch based infusibilized fiber at 600° to 900° C,
- (ii) activating the thus obtained carbon fiber in the presence of alkali, thereby obtaining a meso-phase pitch based active carbon fiber having a BET specific surface area of 30 to 1000 m²/g whose pores consist essentially of micropores having an average pore radius of 0.2 to 1 nm;

forming positive and negative electrode material by formulating a mixture of said activated carbon fibers, conductive carbon black and a binder and applying the mixture to a solid conductive metal support;

positioning the positive and negative electrodes so formed in non-contacting relationship in a container with an electrolyte; and subjecting the positive and negative electrodes to a charge/discharge treatment in which the capacitor is charged at constant current density at a gradually an increasing voltage until the voltage exceeds 2.5 V up to 3.5 V, thereby forming an electric double layer at the interfaces of the electrodes of the capacitor and the

electrolyte and thereafter discharging the capacitor at a constant current density.

Claim 11. (Previously Presented) A method of increasing the charge/discharge

capacities of activated carbon fiber for an electric double layer capacitor, comprising:

(i) carbonizing a mesophase pitch based infusibilized fiber at 600° to 900° C,

(ii) activating the thus obtained carbon fiber in the presence of alkali, thereby obtaining

a meso-phase pitch based active carbon fiber; and

(iii) immersing the thus obtained carbon fiber in an electrolyte in which a current is

applied at constant current density and at a gradually an increasing voltage until the voltage

exceeds 2.5 V up to 3.5 V to the mesophase pitch based active carbon fiber with the result that

an electric double layer is formed at an interface of the mesophase pitch based active carbon

fiber and the electrolyte to thereby effect charging, and thereafter discharging the capacitor at

a constant current density.

Claim 12. (Previously Presented) The method as claimed in Claim 11, wherein the

activated carbon fiber has a BET specific surface area of 30 to 1200 m²/g.

Claim 13. (Previously Presented) The method as claimed in Claim 11, wherein the

activated carbon fiber has an average pore radius of 0.2 to 1 nm.

Claim 14. (New) The method as claimed in Claim 10, wherein the carbon fiber is milled

to a particle size in terms of average particles in the range of 5 to 50 μ m prior to activation step

3

Appln. No. 10/656,147

Reply to the Office Action of October 13, 2005

(II).

Claim 15. (New) The method as claimed in Claim 10, wherein said activation of the

carbon fiber occurs in the presence of alkali metal compound in a weight ratio of alkali metal

compound to carbon fiber of 0.5 to 5.

Claim 16. (New) The method as claimed in Claim 10, wherein said activation is

conducted in an inert gas at a temperature of 500 to 900° C.

Claim 17. (New) The method as claimed in Claim 10, wherein said electrolyte in the

charge/discharge treatment is an organic nonaqueous electrolyte.

Claim 18. (New) The method as claimed in Claim 11, wherein the carbon fiber is milled

to a particle size in terms of average particles in the range of 5 to 50 μ m prior to activation step

 \mathcal{L}

Claim 19. (New) The method as claimed in Claim 11, wherein said activation of the

carbon fiber occurs in the presence of alkali metal compound in a weight ratio of alkali metal

compound to carbon fiber of 0.5 to 5.

Claim 20. (New) The method as claimed in Claim 11, wherein said activation is

conducted in an inert gas at a temperature of 500 to 900° C.

4

Appln. No. 10/656,147 Reply to the Office Action of October 13, 2005

Claim 21. (New) The method as claimed in Claim 11, wherein said electrolyte in the charge/discharge treatment is an organic nonaqueous electrolyte.

Claim 22. (New) The method as claimed in Claim 10, wherein the electrodes are immersed in the electrolyte of the container.